SECRET

21 DEC 1978

MEMORANDUM FOR: Comptroller

THROUGH: Deputy Director for Administration

25X1A FROM: ███████████████
Assistant for Information, DIA

SUBJECT: Information Handling Study

REFERENCE: Your multiple addressee memorandum dtd 28 Nov 78, same subject

1. This memorandum is to respond to your request for issues relating to information handling. We feel this Directorate's general management concerns have been expressed in the June paper, Information Management in the CIA. This Directorate, in addition to providing information handling services to the Agency, also requires information handling services to be able to perform its varied missions.

2. We have sent your memorandum to the offices of the Directorate to obtain their views on this subject. The offices directly involved with providing data processing and communications services addressed the issues, and properly so, from an information handling program office point of view. The other offices, all having information to "handle," have provided valuable responses which I believe will help in the problem definition phase of this effort. (As requested, the responses from all the offices are attached to this memorandum.)

3. The following subparagraphs, keyed to paragraph 3 of the referenced memorandum, provide a Directorate point of view.

a. We offer a broad definition of information handling: Information handling is the acquisition, storage, reproduction, processing and transfer of data.

UNCLASSIFIED WHEN SEPARATED
FROM CLASSIFIED ATTACHMENTS

SECRET

b. The major problem: The efficient and effective application of the technologies and disciplines required to handle the Agency's information. The records management and information security issues need to be addressed as well as the closely related technologies of communications, data processing and word processing.

c. Programs to be addressed: Programs which include the application of information handling technologies and disciplines for information which will be shared or transferred between components should be addressed in the proposed study. Specific programs are listed in the attached office responses. In addition to these, the Assistant for Information is actively involved with automation in the records management support area: growth of word processors in the Agency, development of automated registries and development of automated records inventory systems.

4. Our efforts in defining information handling issues and attempting to come to grips with them are not unique to the CIA. The Agency is in receipt of a draft OMB circular entitled "Responsibilities for the Acquisition and Management of Federal Information Technology." The thrust of this proposed circular is toward the integrated management and review of technologies which support information handling activities. The features in this draft circular as well as future revisions to this draft should be included in this study as planning to meet external requirements is very much part of an information handling strategy.

25X1A

5. If we can be of further assistance to this "statement of problem" phase, please call me or ▆▆▆▆▆▆▆, x5117.

25X1A

Signed
▆▆▆▆▆▆▆▆▆▆

25X1A   Attachments:
As stated

Distribution:
Original - Addressee w/atts
1 - Each Office Director w/atts
1 - C/IPS w/atts
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1 - AI Chrono w/o atts
AAI/DDA:▆▆▆▆:ydc   (21 Dec 78)

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1 3 DEC 1978

MEMORANDUM FOR: Assistant for Information, DDA

25X1A

FROM   : ███████████████
                 Director of Communications

SUBJECT   : Information Handling Study (U)

REFERENCE   : A. DDA 78-4384/1, dated 28 November 1978
                 B. DDA 78-4384, dated 21 November 1978

The Office of Communications' (OC) comments and views on the information handling subjects, identified in Reference B., are attached. OC perceives the information handling issue within the Agency as serious, deserving the attention of senior management, and study by a competent consultant. (C)

25X1A

Attachment:
  As Stated

027862
12 Dec 1998
A9c2.1

A.   Information Handling Definition:

   1.   The Office of Communications' (OC) perception of the field of information handling is summarized in the following proposed definition of information handling: (U)

   "Information handling encompasses all activities, subject to Agency security requirements, required to transform, process, and transfer information from an information source to an information sink."   (U)

   2. This definition is proposed to include the traditional functions of origination, transformation, indexing, categorizing, dissemination, storage, retrieval, transmittal, and utilization normally associated with information handling. "Information" is considered to be any data that contains knowledge useful to or required by the Agency.   The definition of information should not be limited to intelligence collection efforts and should at a minimum include technical and administrative data.   It is further suggested that the division between processing and transmission responsibility be considered to be at that point in a process where information must be transmitted to some distant device for the process to continue or be consumed.   (U)

   3.   It is strongly recommended that any definition of information handling adopted by the Agency give full consideration to security requirements.   (U)

B.   Major Problems:

   1.   The lack of centralized management control of the Agency's information handling resources and activities allows separate and, at times, uncoordinated planning, programming, design, engineering, maintenance, and support activities by various Agency components.   The net result is often duplication of effort and inefficient use of resources.   (U)

   2.   The lack of a comprehensive Agency Information Handling Strategic Plan renders ineffective attempts to develop coordinated, complementary information handling programs.   (U)

   3.   The requirements solicitation process is fragmented and uncoordinated.   Customers are not familiar with or cannot comprehend the technical aspects of information handling. Consequently, requirements are poorly stated or underestimated. (U)

4. The information handling field is experiencing an explosive growth rate. There are no provisions to acquire resources based on requirements perceptions, and new acquisitions are often unable to accommodate the actual work load once they are installed. (U)

5. Charter conflicts between Agency components are presently developing and promise to worsen in the future. Technological advances have eliminated many of the traditional functional boundaries associated with information handling. Computer security and communications security efforts are also becoming inseparable. Consequently, many OC/ODP and OC-CSD/OS-ISSG areas of interest and responsibility are in dispute or have the potential of developing into conflict situations. (U)

6. There are areas of severe imbalance between work load and resources. Customers, occasionally, are forced to accept lengthy delays in service. This imbalance sets the stage for information handling users to initiate their own programs to acquire and implement equipment or systems to satisfy their requirements. This situation has serious managerial and security implications. (U)

7. Information handling systems acquired in the past have traditionally been functionally oriented due to technology limitations. The current physical plant incorporates many different types of equipment and necessitates diverse training and maintenance requirements. Information handling systems of the future should be multiple service oriented to the maximum extent possible in order to increase support efficiencies. (U)

8. Current Agency data base support/utilization, from OC's viewpoint, is characterized by dated information and incorrect, incomplete reports. Such a situation results in inefficiency and justification for a component to acquire its own local system in order to overcome this problem and to realize the advantages of automatic data processing. (U)

Management Issues:

1. The current organization and division of responsibilities among Agency components concerned with information handling is considered inefficient, results in duplication of effort, and fosters the potential of charter conflicts. A major reorganization to eliminate competitive situations and to centralize the planning, programming, development, engineering, and support of information handling activities should be given serious consideration. (U)

- 2 -

2. Acquisition of new information handling equipment and systems should be tightly controlled to ensure compliance with Agency operational, technical, and security guidelines and standards. All new equipment procurement should also be reviewed to ensure compliance with an Information Handling Strategic Plan. (U)

3. Determination of the requirement for compartmentation and need-to-know protection in the electronic environment is a prerequisite to major decisions about the direction of future systems. Policy regarding data integrity and accountability should also be developed. The potential of a major impact on the Agency's information handling systems due to these considerations should not be underestimated. (U)

4. Resource limitations are severe and are perceived to increase. The implementation of an integral information handling/processing system to satisfy virtually all Agency requirements is recommended in order to reduce or eliminate the requirement to operate and maintain functionally different systems (narrative, data, fascimile, data terminal, and secure voice). Technological advances, primarily in electronic components, have fostered integral system design. It is no longer possible to identify the boundary between data processing and telecommunications. The integration of multiple, interrelated functions within information handling hardware will force the Agency to address an integral system implementation. (U)

5. Skill profiles of employees required to design, install, operate, and maintain new information handling systems must reflect modern technological training. An ambitious training program to upgrade the skills of employees in the techniques, operation, and maintenance of modern information handling systems should be seriously considered. Provisions should also be made to enable specialist to advance to upper grade levels without the requirement to assume managerial responsibility. Entry of skilled/specialized middle and upper management officers from industry should also be encouraged in order to introduce new ideas and concepts into Agency information handling management. (U)

6. Recent and perceived advances in end-to-end encryption techniques, file encryption, and verifiable software (secure operating systems) will enable processing systems to simultaneously execute multilevel classification and compartmentation jobs. The justification to operate separate processor centers based on sources and methods compartmentation is no longer valid. The application of computer and communications security features to Agency computer systems could result in centralization of functions and significant resource savings. (U/AIUO)

- 3 -

7.   Implementation of wideband information handling systems and the large amounts of classified data that can be accommodated on these systems increase the attractiveness and potential of a penetration. Consequently, all wideband information handling systems should have their communications systems secured. Technological advances have enabled the cost-effective implementation of security systems to protect large distributed communications/computer networks. Adequate TEMPEST profiles of all Agency information systems will continue to be a requirement. (U/AIUO)

Programs:

Tabulated, by priority, and without elaboration are those programs that OC feels have a bearing on the Agency's information handling issues: (C)

        SAFE
        CRAFT
        CDS
        COMET
        ADSTAR
        DORIC-W
        ETECS
        PEGASUS
        FAR
        AFT
        APARS   (C)

Technology subjects/programs having a potential impact on information handling systems include: (C)

25X1A   ███████████
             SAFE COMSEC Subsystem
             ████████

25X1A   Wideband Communications Technology
             Data Encryption Standard   (C)

ODP-8-2243

MEMORANDUM FOR: Assistant for Information, DDA   STATINTL

FROM   :   ▮▮▮▮▮▮▮▮▮▮▮
                  Deputy Director for Data Processing

SUBJECT   :   Information Handling Study

REFERENCES   :   a.   Your memorandum of 28 November 1978,
                       same subject, (DDA 78-4384/1)
                  b.   Multiple addressee memorandum from
                       James H. Taylor, dtd. 21 November 1978,
                       same subject, (DDA 78-4384)

     1.   In responding to your inquiry about the information
handling study we are, in a sense, receiving our own forward
pass, since we collaborated in the preparation of the inquiry.
In addition, the DDA response to the Taylor memorandum will
be part of the raw material to be used by ODP and the Office
of the Comptroller in the preparation of an Agency position
on this subject. However, in the interest of completeness
in the DDA response, the following input is offered.

     2.   Taylor's question 3.a. involves the definition of
information handling. Two definitions have been suggested
by ODP personnel. One of them, which appears in a draft OMB
Circular #A-71, is really a definition of information tech-
nology, but it is also potentially a definition of information
handling. The definition reads: "Information technology is
all computer and telecommunications hardware and associated
software which is used to store, disseminate, transmit, or
otherwise process information and which have a development
or acquisition cost in excess of $10,000. Information tech-
nology also includes all resources directly related to the
acquisition, development, operation, management or disposal
of that technology including but not limited to people,
facilities, and supplies." Another possible definition of
information handling, which may however prove too comprehensive
to be of practical utility, is as follows: "An information
handling system can be defined as the total collection of
people, procedures, and equipment designed, built, operated,
and maintained to record, process, store, communicate, retrieve,
and display data that provides people with information to
support their decisions and actions."

3. On Taylor's paragraph 3.b., having to do with major problems in handling information, the most serious problem identified by ODP has to do with the gradual and inexorable blurring of the distinctions which once separated ADP functions from communications functions and the further complications created for both of these major disciplines by the arrival on the scene of "smart" multiplexers and word processing technology. Indeed it was a realization of the gradual merger of these technologies which caused ODP and Office of Communications leaders to form a joint planning group and to collaborate with the then Assistant for Information to develop the proposal which in time led to the present request from the Comptroller.

4. At a second level of significance a number of information handling problems can be identified. These include the availability and the allocation of user terminals; the availability of an adequate communications network to support these terminals; the allocation of adequate physical space to house ADP and Communications hardware; the use of Agency resources to develop and support community-wide ADP systems; the attraction and retention of qualified ADP professionals given the inducements present in today's marketplace; the need for a greater degree of standardization in the Agency's development of ADP software; and the need to achieve Agency standardization in dealing with a burgeoning hardware market which includes a profusion of minicomputers and microcomputers.

5. Regarding paragraph 3.c. in the Taylor memo, the answer to the question on Agency-wide management issues is foreshadowed in paragraph 3. above. Certainly the merger of technologies and the implications of that merger must be of concern to Agency managers. Related is the prospect of uncontrolled proliferation of various standalone devices loosely covered by the general rubric, "word processors." The proper organizational placement of control over word processing, the relationship of that control to organizational control over computerized printing, and the relationship of both of those functions to the traditional functions of communications and ADP, involve organization issues which must be dealt with at the Agency level.

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6. There is one other major issue which deserves attention although, regrettably, its resolution does not lie within the independent authority of the Director of Central Intelligence. Despite the increasing availability and utility of minicomputers as a viable alternative to large scale centralized computers, restrictive procurement directives and budgetary decisions have imposed limitations on ODP which cripple its efforts to manage the development of this alternative in a logical and systematic manner. Indeed, this question of restrictive procurement directives goes beyond the matter of minicomputers into a whole realm of ADP procurement and could inhibit any Agency program to manage, in a thoroughly systematic way, the complex of activities which can be called information handling. At some point the limitations imposed on this and other agencies by these restrictions and the cost to the U.S. taxpayer of these restrictions should be addressed and brought to the attention of senior policymakers in the government.

7. Paragraph 3.d. in the Taylor memorandum asked what programs underway have a bearing on these issues. Clearly from the ODP point of view the system most likely to bear upon the development of information handling in CIA is the SAFE system. Any external study of our attempts to develop more effective information handling practices would be incomplete if it did not evaluate SAFE and its long range implications. Another program which deserves attention is the ODP effort to standardize on a general purpose, versatile soft copy terminal complete with options which would turn the terminal into a very powerful microcomputer and word processor interconnected with other terminals, with the mainframe computers and, in theory at least, also connected to other locally positioned minicomputers. Finally, we now have the capability to generate cables in electronic form, ready for transmission once released, and we are developing the ability to create the input to the Office of Logistics ETECS system. Such information handling capabilities have large implications for the ways in which we will communicate, manipulate and publish intelligence information in the future.

8. As the answers to these questions were being collected in ODP there was frequent reference to the size of the problem under discussion and one knowledgeable group used the phrase "formidable undertaking" to describe the nature of this task. Regardless of how formidable it may be, it seems to us imperative that some systematic way be found to address these problems. The prospect is clear; they can be addressed now while they are still relatively

small or they can be addressed later after they have created
untold mischief and uncounted headaches for Agency managers.
In the words of the television advertisement, "You can pay
me now or you can pay me later." The price we pay now,
however large, will assuredly be smaller than the price
we pay later.

STATINTL

MEMORANDUM FOR: ███████████████ STATINTL

Assistant for Information, DDA

FROM: Thomas B. Yale
Director of Finance

SUBJECT: Information Handling Study Response

1. This is the response you requested in your 25 November 1978 memorandum. We have structured our responses according to Mr. Taylor's questions in his memorandum of 21 Nov 78.

    A. Information Handling Definition: Information Handling is the preservation of data from the time it is displayed in readable form until it is no longer required and destroyed. This preservation period consists of many manipulatory activities including but not limited to: editing, filing, reorganizing, calculating, reporting, publishing, querying, statistics, distributing, linking related data (directly related or referenced data), historical and archival.

    B. Major problems in handling information: Our major problems are: (1) the volume of information requiring our response to short deadlines because (a) distribution to us takes days (b) preparation of response takes too much time even with the use of MAG CARD II; (2) distribution from us requires time for making copies and mailing to recipiants; and (3) monitoring requested responses requires clerical support.

    C. Agency wide management issues:

        1. Reorganize organizational structures to minimize coordination requirements encountered when developing and maintaining information handling systems. With a move towards increased requirements in utilizing computer teleprocessing networks, Office of Data Processing and Office of Communications need to be more closely associated organizationally.

    2. Duplicate effort in many components vice a network approach to information handling.

D. Programs bearing on these issues:

              CRAFT

              AMPS/FAMPS

              RAPID   STATINTL

              ETAR

    2. Hopefully our response will be helpful in developing the consolidated DDA response. If you have any questions address them to ▮▮▮▮▮▮▮▮▮▮▮▮▮ C/Plans and Systems Staff/OF, on extension 2967.

                         STATINTL

▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮

                    Thomas B. Yale

1 3 DEC 1978

MEMORANDUM FOR: Assistant for Information, DDA

FROM: James H. McDonald
                 Director of Logistics

SUBJECT: Information Handling Study (U)

REFERENCES: a. Multi adse memo fm AI/DDA dtd 28 Nov,
                     same subj (DDA 78-4384/1; OL 8 5409)

                 b. Multi adse memo fm Comptroller dtd
                     21 Nov, same subj (DDA 78-4384)

     1. Per your request, this memorandum responds to the
questions contained in reference b. Our answers which follow
are keyed to the appropriate paragraphs in reference b. (U)

          a. Definition: An information handling system
     can be defined as a collection of people, procedures,
     and equipment designed, built, operated, and main-
     tained to collect, record, process, store, retrieve
     and display information. The system may be computer-
     based or manual, or include both of these.

          We have taken the liberty of adding the
     word "system" to "information handling" since,
     in our view, there are so many different parts
     and facets to the processes of gathering,
     transferring, and storing information that the
     processes can best be described as a system.
     Further, our logistics courier service, which
     is a manual information handling subset, is
     as much a part of the system as are the com-
     puters and electronic transmission devices. (U)

          b. Technological advances have given us the capa-
     bility to collect enormous amounts of information. There
     is such a proliferation of information and "hard copy"
     printout that managers are being inundated with mounds

SUBJECT: Information Handling Study   (U)

of information. It becomes very difficult for managers
to sift through this vast amount of material, retain
what is significant or germane to their specific needs,
and encapsulate this data into something meaningful
which can help them in making decisions.

Speaking from the Office of Logistics (OL) and
DDA perspectives, it would appear that we are being
propelled by these technological advances and all the
possibilities offered. We are responding independently,
rather than collectively, without understanding the
full impact of all the small parts of the system on the
other parts. There needs to be a greater effort towards
the integrated development of information handling
systems, with direction and coordination stratified at
the directorate level. (U)

c. Closely related to the question just addressed,
there is a definite need for centralized planning, at
least at the directorate level. It is important to
keep pace with advanced technology and, when upgrading
the system, to be sure to take into account the total
system. For example, computer-based systems tend to
generate large amounts of "hard copy." Not only are
the massive amounts of paper bulky, it becomes difficult,
if not impossible, to store--and the tendency is for
the user to generate and retain all this paper. Only
information that needs to be retained outside the com-
puter should be kept, and then it should be reduced to
a manageable size. Therefore, it is important that
sufficient microform equipment be available to reduce
records to a manageable size.

We envision major problems in the information
being collected. Systems today make it easy to collect
all kinds of data. There needs to be more collaboration
among offices to prudently select only that information
which is meaningful. There needs to be a closer inte-
gration of manual and computer-based systems, with
perhaps greater reliance placed on use of "electric
mail." Not only would this shift enhance the security
of transmitting mail, it would lend to a more effective
utilization of the courier system. (U)

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SUBJECT: Information Handling Study (U)

     d. OL has a number of computer-based systems which impact other offices within, as well as outside, the directorate. The ETECS, managed by the Printing and Photography Division, can be accessed by other users. The CONIF, ICS, SECOND, and others directly effect operations in other offices. As these and other planned OL systems develop, it is important that there be more cooperation and planning among offices.

     Looking ahead, OL operations provide a fertile environment for computer-based management information systems. Some of these have been developed and others are yet to come. Eventually, we can foresee the electronic transmission of requisitions from field stations directly into the Inventory Control System. The Clandestine Records Application Field Terminal (CRAFT) system, currently under development and ex-pected to be operational in the early 1980's, will provide a capability between field stations and Head-quarters for electronic transmission, storage and retrieval of formal records. Systems such as these must be looked at in the broadest context so that the needs of all intended users are properly addressed. (S)

    2. The above responses obviously are not intended to pro-vide an in-depth analysis of the problems we are addressing. However, we believe this is an area of major concern, and this office is prepared to participate in any way that it can to properly deal with this important issue. (U)

James H. McDonald

STATINTL

13 December 1978

STATINTL

MEMORANDUM FOR: ████████████ Assistant for Information, DDA

FROM: Charles A. Bohrer, M.D.
Director of Medical Services

SUBJECT: Information Handling Study

REFERENCE: DDA 78-4384/1 dtd 28 November 1978,
same subject

1. Since it appears to have been concluded the capability does not exist within the Agency to satisfactorily complete an Information Handling Study, it appears reasonable to retain external consultants to assist in accomplishing this task. Whatever external group is selected should have people assigned with expertise in computer hardware and software, data communications, information storage systems, word processing, information handling management, et cetera and who do not have a vested interest within their areas of expertise. It is further agreed the consultant group should have a proven record of successfully addressing and solving other organizations' information-handling problems and needs. Finally, it is most important to have the consultants work with an Agency group devoted to this study, so that any resulting conclusions and recommendations are realistic and pertinent to the Agency's needs.

2. The following material addresses information handling and management issues it would be anticipated would be included in the statement presented for senior Agency management review and discussion:

This document is UNCLASSIFIED

SUBJECT: Information Handling Study

a. A definition of information handling should include those activities, equipment, and supplies used to collect, transmit, encrypt, decrypt, compress, decompress, analyze, interpret, store, retrieve, share, collate, transform, classify, display, produce, publish, retire, and destroy information to assist the Agency in accomplishing its missions and functions.

b. Major problems that face the Office of Medical Services (OMS) are the following:

(1) Principally Intraoffice

(a) protection of individual privacy and medical confidentiality,

(b) satisfying medical-legal requirements for authentication, accuracy, and retention of information, and

(c) Current information handling activities (IHA) are by necessity divided among several OMS personnel to enable satisfactory transaction of required IHA. Any program which would integrate all IHA and make these functions the responsibility of one person would require a major realignment of duties of several staff personnel, require additional training for the concerned OMS staff and/or depending on the magnitude and complexity of the IHA task may require the establishment of a new specialized position.

(2) Interoffice/Multi-office

(a) automated system to identify outdated employee, dependent and applicant records for destruction,

(b) automated system to prevent double payment of medical insurance claims by OMS, Personal Affairs Branch, Office of Personnel (OP), and the Insurance Branch.

(c) re-institution of the automated system to advise OMS and all other Agency offices of all accountable property so these items can be properly monitored, and

SUBJECT: Information Handling Study

        (d) automated transfer of administrative information between OMS, OP, Office of Security, et cetera to expedite case processing and research studies, while protecting individual medical confidentiality and privacy.

c. Agency management issues that need attention:

        (1) development of a managerial structure to manage, develop, control, coordinate, and optimize information-handling activities without destroying individual office requirements and creativity,

        (2) expansion of activities to utilize standard hardware and software so as to derive the benefits of economy of scale and reduce maintenance and training requirements,

        (3) continuation and enhancement of the activity to continually monitor technological advances in information-handling capabilities to assist in determining contractural commitments. This will assist in determining the resources required to provide satisfactory support for Agency activities, while retaining the flexibility to move in a number of directions consistent with the advancement in technology and business manipulations.

        (4) Should information handling activities (IHA) be the responsibility of one or several individuals in each office, directorate, and the Agency? Whatever the decision, what authorities will this/these individuals have in dealing with information handling issues? Can existing staff personnel absorb and be trained to carry out IHA or must new positions and personnel be obtained to satisfactorily perform these newly integrated activities?

d. Programs now underway that have dramatic implications in information handling and are candidates for applying a coordinated holistic information handling approach are the following:

    (1) SAFE and

    (2) CRAFT

STATINTL

Charles A. Bohrer, M.D.

PERS 78-7044 2

78-4384/2

ADMINISTRATIVE - INTERNAL USE ONLY

12 DEC 1978

STATINTL

MEMORANDUM FOR: ██████████████
                      Assistant for information, DDA

FROM   : F. W. M. Janney
                 Director of Personnel

SUBJECT   : Information Handling Study

REFERENCE   : AI/DDA memo to D/Pers (DDA-78-4384/1)
                 dated 28 Nov 78, same subject

1. In response to referent memorandum there follows our perspective
on the information handling and related management issues. Reply is keyed
to the questions in paragraph 3 of the Comptroller's memo of 21 November
1978.

    a) Definition: Information handling is the acquisition,
reproduction, storage, processing and transfer of data.

    b) Major problems in Information Handling as related to
ADP, communications, records management, and word processing:

        -- Inter office and inter directorate coordination
    and cooperation when interfaces between the various Agency
    Automatic Data Processing Systems are required. The issue
    generally arises as to which system will be modified to
    allow for compatible interfaces. When neither party or
    parties will modify their system, it means the storing of
    extra data for identification purposes or extra processing
    is required in order to make the data passed compatible.

        -- Lack of a systematic approach to the modernization
    of information handling systems. Most progress is made
    on an individual basis with little or no transfer of the
    learning experience to other areas. (Re-inventing the
    wheel each time!)

ADMINISTRATIVE - INTERNAL USE ONLY

Subject: Information Handling Study

       -- Problems in obtaining new terminals, printers and communications lines for outlying buildings.

       -- Problems in maintaining reliable communications circuits for outlying buildings.

c) Agency wide management issues in Information Handling:

       -- Is the current structure for the coordination of word processing equipment adequate?

       -- Should there be an Agency Information Control Officer at the DCI level for policy, planning and control to include ADP, word processing and communications? Info Control Officers and staffs at the directorate level and office level?

       -- Should the Info Control Officer staff include a data base management function?

       -- Are the communications requirements of the offices being satisfied? Is the present communications system providing satisfactory service?

       -- With the move towards minicomputer, is ODP taking steps to assure they will be able to support customers in the future?

       -- Should there be any changes in the way the acquisition of minicomputers is coordinated, or should ODP continue to be the central point of coordination?

       -- Is there adequate project oversight and reporting at the directorate level (to avoid ADP projects which go on forever but never get completed)?

d) Programs underway or planned which have a bearing on these issues:

       -- PERSIGN: interfaces with several other offices, and the interface issue it raises.

ADMINISTRATIVE - INTERNAL USE ONLY

ADMINISTRATIVE - INTERNAL USE ONLY

Page Three

Subject: Information Handling Study

-- The current personnel computer system and the problems of getting reliable communications in outlying buildings in order to use the system properly.

-- Improving the word processing capability in the Office of Personnel.

-- The Applicant Processing computer system and Insurance System and the problem of obtaining terminals and communications support.   STATINTL

F. W. M. Janney

14 DEC 1978

MEMORANDUM FOR: Assistant for Information, DDA

FROM: ███████████████████   STATINTL
                 Deputy Director of Security
                 Policy and Management

SUBJECT: Information Handling Study

REFERENCE: Memorandum from AI/DDA to multiple
                 addressees dated 28 November
                 1978, same subject (DDA 78-4384/1)

     The following comments are submitted in response to
questions posed by the Comptroller as set forth in the
attachment to the reference:

     a. How, for management purposes, should we
define information handling?

     Answer: That process which involves the economical
and efficient storage, retrieval and communication of
useful information and the systematic elimination of
information as it becomes obsolete.

     b. What are your major problems in handling information
that presently affect or will in the future affect the
performance of your component and/or other Agency
components?

     Answer: The Office of Security views its most
significant problem as being in the area of computer
downtime. This factor, in many cases very subtle, has
a cumulative effect that can result in major losses in
resources and program effectiveness.

     c. What are the Agency-wide management issues in
information handling that you believe need attention in
this study?

     Answer: It is the opinion of this Office that the
most important information handling issue facing

                                        OS 8 3214-A

the Agency and the Community today is computer
security. In view of the lack of confidence and
reliability in computer software and the growth
of computers into large systems and networks, the
threat of a major security incident is very real.
Systems have been proven to be vulnerable and in
view of the quantity of information we are now
computerizing, the potential penetration loss and
compromise could be devastating.

Another management issue in information handling
that in our view should be of significant Agency
concern is the growth in the amount of information
we are collecting and perhaps unable to use. This
issue applies to the growth of our records both in
hard copy and computerized form. While we have
acknowledged this growth problem in the hard copy
world, the compression capabilities of computers
and microfiche have tended to make the problem less
visible in these areas.

    d. What programs, now under way or being planned,
do you think have a bearing on these issues and therefore
need to be addressed in this study?

    <u>Answer</u>: The Directorate of Administration as well
as other Agency components have made significant strides
in a formal manner over the past year in reviewing
Agency records for the purpose of identifying obsolete
materials. In our view these records review programs
have a distinct bearing on aspects of the information
handling problem. In addition, current attention is
focused on the need for document accountability; while
this activity has mainly concerned hard copy material,
the issue certainly involves computerized data.

STATINTL

OTR 78-8825
14 DEC 1978

MEMORANDUM FOR: Assistant for Information, DDA

FROM: Harry E. Fitzwater
                  Director of Training

SUBJECT: Information Handling Study

REFERENCE: Your memorandum dated 28 November 1978,
                  Same Subject

    1.   Listed below are Office of Training (OTR) comments and perspectives on the Agency's goal concerned with information handling.

    2.   Critical to the development of a better structure for coordination and carrying out the Agency's information handling activities is an improved understanding among the personnel of the Agency about the on-going activities in this area and the rapidly evolving technology developments which might improve the performance of these activities. With respect to major problems we feel that each Agency component must define its own specific information needs. For example, OTR needs to understand what it is expected to produce and the time frames within which production must take place. OTR operations have to be responsive to the goals of its consumers; thus, most critical to OTR are component management goals which can be translated into training needs.

    3.   The OTR Information Science Center in its various courses can help develop better tools for data handling. An understanding of the information handling problems and the issues involved might be facilitated in some instances by the development of system dynamic models of these systems-- or perhaps other types of models, such as queuing. To do this successfully generally requires a partnership between the people that have the problem and the methods people, and some degree of familiarity on the part of each of the participants with the other's tasks.

SUBJECT: Information Handling Study

    4.   The Office of Training stands ready to assist in
this study to the extent of its resources and capabilities.

STATINTL

/~ Harry E. Fitzwater

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31 May 1979

DD/A Registry
File _exam_

MEMORANDUM FOR: Secretary, Executive Committee

FROM: Clifford D. May, Jr.
                  Associate Deputy Director for Administration

SUBJECT: Information Handling Study

1. It is requested that the Executive Committee be advised
that the Information Handling Study Team has been formed and has
held its first get-acquainted meeting. The team consists of:

STATINTL

          CSD/OC/DDA   - Team Leader
          , ORD/DDS&T
          DP/DDA
          OCR/NFAC
          /DDO

There may be some adjustments in team membership as the actual
plans for the study begin to take shape.

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2. The Study Team will be located in 3 D 57 Headquarters
beginning about 13 June. In the meantime, the members will be
working out of their previous offices with the exception of
who has been provided temporary office space in
the O/DDA area. As the initial task, the team will develop
terms of reference and an initial schedule for the study. We
hope to be able to report to the Executive Committee on this
initial effort before the end of June.

/s/ **C. D. May**

Clifford D. May, Jr.

Distribution:
  Original - Addressee
      1 - Each member Info
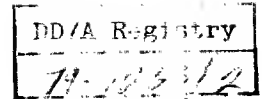   Handling Study Team
      1 - DDA Subject   1 - D/ODP
      1 - DDA Chrono   1 - IMS/DDO   **STATINTL**
      1 - ADDA Chrono   1 - OCR/NFAC (Harry Eisenheiss)
      1 - D/CO   1 - ORD/DDS&T (Philip Eckman)

All portions of the Memorandum
are UNCLASSIFIED

STATINTL   30 May 1979

MEMORANDUM FOR: ████████ Team Leader
                          Information Handling Study Team

FROM: Clifford D. May, Jr.
                          Associate Deputy Director for Administration

SUBJECT;   Information Handling Study

The EXCOM is expecting to review the terms of reference and

a schedule for the information handling study during June 1979.

I would appreciate an early assessment of the ability of the study

group to respond to this requirement. Please call me.

                                                                        STATINTL

                          Clifford D. May, Jr.

cc: All team members

Distribution:
  Original - Addressee
          1 - ADDA Chrono
          1 - DDA Chrono
          1 - DDA Subject

Approved For Release 2001/07/12 : CIA-RDP81-00142R000300030014-4

DD/A Registry

File: 79-77)

79-9302

DD/A Registry
79-1,7/8

℞ 2 MAY 1979

MEMORANDUM FOR: Deputy Director for Administration

FROM   : Frank C. Carlucci
                 Deputy Director of Central Intelligence

SUBJECT   : Information Handling Study (U)

REFERENCE   : Comptroller Memo to Deputy Directors and
                 DCI Admin., dtd. 21 Nov. 1978, Same Subject

        On 7 May, I approved the joint DDA/Comptroller proposal for an
Agency information handling study. I would like you to conduct the
study as planned, with three additions. Before the terms of reference
are brought to the Executive Committee for approval, the study team
should reexamine the definition of the information handling problem
and related issues. The end product of the effort should be action
oriented, specifying how to deal with the problem, even if only on a
piecemeal basis. Finally, the terms of reference should include con-
sideration of "doing more with less." (U)

                                    Frank C. Carlucci   STATINTL

cc: EXCOM Members
     D/ODP

⁰ ' MAY 1979

MEMORANDUM FOR: Executive Committee Members

FROM: Deputy Director of Central Intelligence

SUBJECT: Fiscal Year 1979 Review of Automatic Data Processing (ADP)
                  Projects (U)

REFERENCE: Memo to EAG Members from DDCI, dtd. 26 July 1978,
                  Subject: Management of Automatic Data Processing
                  Resources

1.   The purpose of this memorandum is to record Executive Committee
decisions made in the review of major ADP projects and to discuss the
manner in which we will review Agency ADP resource requirements. With
regard to the latter, the Executive Committee will shift its focus from
a narrow review of current year ADP resource consumption to a broader
involvement in both current year and longer range planning and tracking
issues. With Committee Staff and component support, this change should
require less of the members' time on ADP topics. (U)

2.   All Fiscal Year 1979 ADP projects reviewed by the Executive
Committee and currently budgeted are approved at the resource level
requested. Unfunded projects are approved subject to Comptroller
approval of reprogramming or funding requests. (U)

3.   Procedures for monitoring current year ADP costs and reviewing
changes in requirements will be the same as in previous years. The
Office of Data Processing (ODP) will monitor all costs incurred for
projects supported in ODP and will concurrently notify the user office
and the Comptroller when project-incurred costs reach 75 percent of
the approved level. User offices will be responsible for validating
project requirements for the remainder of the fiscal year. If costs
are projected to exceed the initial authorization by more than 10 percent,
user offices, in coordination with ODP, will request Comptroller approval.
The request will include:

-- an explanation of the need for increased ODP services;

-- a new projection of the cost of ODP services required for
   the remainder of the fiscal year; and

— a statement addressing the availability of ODP resources
to provide the increased services and the impact on the
user organization if the increase is not approved. (U)

4. As in the past, components will monitor all costs incurred for
component-budgeted projects. If costs are projected at any point in
the fiscal year to increase by more than 10 percent over the initial
authorization, components will request prior Comptroller approval. (U)

5. In the event that new or expanding Fiscal Year 1979 ADP
projects not previously reviewed by the Executive Committee increase
to established review thresholds, prior Comptroller approval will be
obtained. (U)

6. Agency policy regarding Executive Committee review and manage-
ment of ADP as stated in the reference memorandum remains in effect.
The manner in which the Executive Committee reviews the annual consumption
of ADP resources, however, will be modified. Beginning with Fiscal Year
1980, Executive Committee review will be conducted in four areas:

    a. ODP Resources. During the first quarter of each fiscal
year, the Director of Data Processing will provide the Executive
Committee with an assessment of the current state of ODP, the
totality of current year requirements levied on ODP, its ability
and capacity to satisfy them, and a review of ODP's updated Five-
Year Plan in terms of projected requirements and related capital
investments.

    b. ADP Projects. Executive Committee review of current year
ADP projects will continue to be based on "ADP Project Decision
Forms," whether supported in ODP or with component-budgeted
resources. Previously established review thresholds will remain
unchanged (generally $250,000 annual or cumulative costs—see
reference). The Committee meeting(s) devoted to current year ADP
applications will be limited to policy issues arising from members'
individual review of Project Decision Forms and from staff
recommendations made to the Chairman.

    c. Major Capital Investments. The Executive Committee will
review major ADP capital investments included in the Agency's
Program Plan before it is submitted to the Resource Management
Staff in June of each year. Major capital investments may represent
a one-time purchase or the initiation of a project requiring multiyear
implementation and resultant multiyear payments. This aspect of
Executive Committee involvement will also include a review of
component long-range ADP plans. The Committee Staff will summarize
appropriate plans (e.g., ODP, NPIC, NFAC, DDO) and correlate them
with programmed investment requirements for presentation to the
Committee.

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d. <u>Strategic Objectives</u>. The final aspect of the Committee's review of ADP will involve a broader subject--Agencywide information handling/management. The Committee has already reviewed the plan for a formal information handling study. During conduct of the study, the Committee will track the study team's progress. When completed, the Committee will review and approve selected strategic objectives. Thereafter the Committee will track progress towards achieving these strategic objectives and review proposed changes to the objectives themselves. (U)

7. Appropriate guidance and approval memoranda will be issued to components after the Comptroller and/or Executive Committee reviews directed above. (U)

/s/

Frank C. Carlucci

cc: D/ODP

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2 3 MAY 1979

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MEMORANDUM FOR: Executive Committee Members

FROM   : ██████████████████
                   Secretary, Executive Committee

SUBJECT   : Minutes of Executive Committee Meeting,
                   7 May 1979 (U)

1. Mr. Carlucci chaired the meeting, which was held to reach a
decision on the joint DDA/Comptroller proposal for an Agency information
handling study and to discuss the Executive Committee's role in ADP
management. (Mr. May represented Mr. Wortman.) (U)

2. Mr. Johnson advised that in September 1978 the DCI's goals
conference adopted the following goal: To develop a comprehensive infor-
mation handling strategy for the Agency and a structure for more formal
continuing coordination of the Agency's ADP, communications, records
management, and word processing activities. He explained that a survey
was conducted to help define the Agency's information handling problem.
Analysis of the responses resulted in the following definition of information
handling: Information handling in CIA is the systematic creation, movement,
use, storage, retrieval, and disposal of intelligence and management
information with the support of automated or other clearly identifiable
processes and with due regard for control of sensitive and compartmented
data. The survey also surfaced several major issues in the information
handling area:

   - Lack of a central policy, planning, and coordinating body.

   - Lack of standards to guide development of information
     systems.

   - Lack of mechanisms to deal with information handling
     techniques that cut across traditional functional
     boundaries. (U)

3. Mr. Johnson noted that the key elements to the information
handling problem included the unplanned, random nature of some systems
interaction; the lack of a mechanism to relate systems to each other;
the lack of Agency standards or policies to govern development of new
systems or linkage of existing systems; and the need for more knowledge
about existing information systems, the ways in which these systems
do or do not interact, and the ways in which certain systems should

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interact. The current state of information management technology was characterized by the search for ways to enhance productivity, uncoordinated growth in the use of word/text processors, the use of computer terminals as word/text processors, automated registries, and the blurring distinctions between ADP and communications. To illustrate the significance of word processing equipment, Mr. Johnson noted that the Agency was currently spending more than $3 million a year on such equipment and more than $1 million in rentals. He then highlighted those Agency activities currently under way in the word processing area. (C)

4. Alluding to the recommendations of the recent security task force, Mr. Johnson noted that ten of them had been deferred pending the results of the proposed information handling study. He called attention to three that were particularly relevant: conduct an intensive review of registry operations; establish strict registry control of Top Secret and SCI documents; and develop central, formalized, computerized document accountability systems. (C)

5. Three options for attacking the information handling problem were presented to the Committee:

- The status quo. Informal coordination. Mr. Johnson thought this option ignored the evidence of a real need for a more effective central coordinating mechanism.

- Create an information systems coordination staff. Mr. Johnson asked whether such a staff could be effective without a broad knowledge of existing systems.

- Approve the information handling study. Mr. Johnson noted that this would create a data base on which to build an effective coordination mechanism. (U)

6. Outlining the approach to the information handling problem envisioned in the third option, Mr. Johnson explained that it would entail DDA's designating a full-time project manager and a small staff of two-three people. The staff should have a strong knowledge of communications, ADP, and records management. The project manager will develop the terms of reference for the study, which will be reviewed by the Executive Committee. Contractor support will be considered. The basic task of the project manager will be to develop a strategic plan over a period of about one year, during which he will make periodic reports to the Executive Committee. The final plan will be approved by the Committee, which will monitor its execution. It is understood that the plan may result in some organizational shifts. (U)

7. Mr. Johnson envisioned an eventual broadly based coordination mechanism that would deal intelligently with information handling proposals from components. He emphasized that room would be left for individual component planning. Mr. Carlucci observed that such a body would probably

be a reactive rather than an aggressive policy-shaping group. Mr. Johnson said he thought the group would point out any inappropriate duplication that might take place and would take an active role in applying the basic guidelines in reviewing solutions proposed by components. (U)

8. Mr. Dirks emphasized the importance of determining the specifics of the information handling problem before opting for a solution. Mr. Hicks was skeptical about the value of conducting yet another study. Messrs. Johnson and May assured the Committee that the proposed study was designed to facilitate a clear understanding of the many facets of the information handling problem. Noting that ODP handled only 50 percent of the Agency's ADP activities, Mr. McMahon expressed concern that the proposed staff for the study seemed to lack adequate directorate representation. Mr. May emphasized that the staff would be multi-directorate in nature. Mr. Johnson added that the DDA, however, did seem to be a logical place for the staff to report. (U)

9. Noting that information handling presently receives only part-time attention, Mr. Hicks suggested that someone should oversee this area on a full-time basis. He added that at one time he thought the D/ODP would be a logical choice, but he now agrees that the latter has too many other responsibilities. (U)

10. Mr. Carlucci speculated that the proposed study could surface many issues and problems and suggest a mechanism for dealing with them. This mechanism could address all or only some of the problems and could perform either a policymaking or coordination role. In developing strategies for problem solving, it might or might not rely on cost/ benefit ratios as primary criteria. In short, Mr. Carlucci concluded that the problem almost seems too large to handle. Recalling his earlier concerns, Mr. Hicks said the proposed study could simply conclude that the Agency has a big problem, and we would be back where we started from. Mr. Johnson explained the need to identify which parts of the problem should be looked at, and assured the Committee that the study would be a full-time effort. Mr. Carlucci suggested that the terms of reference for the study should be action oriented, specifying how to deal with the problem, even if it deals only with pieces of it. (U)

11. Mr. Johnson noted that the existing informal coordination mech- anism does take into account cost/benefit considerations for stand-alone ADP applications. What is lacking, however, is an interface enabling someone to cut across existing systems. In response to Mr. Carlucci's comment that he thought ODP performed this function, Mr. May explained that ODP planned and designed only 50 percent of the Agency's ADP systems. Mr. Carlucci asked why ODP could not be charged with monitoring all Agency systems to ensure compatibility and prevent duplication. Mr. May said it could, but not with current resources. ODP would have to become involved in component ADP projects earlier, being given component problems rather than solutions. Noting that information handling included communi- cations and word processing, he said that ODP could only resolve part of the problem. In response to Mr. Dirks' question, Mr. Carlucci said

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he was suggesting that ODP play a coordinating role, not necessarily
that all ADP activities should be centralized in ODP. Mr. Dirks suggested
that having "the biggest doer" serve as the coordinator could generate
conflicts of interest. (U)

12. Mr. Carlucci agreed to leave establishing the study staff to the
DDA. Mr. Hicks suggested the Comptroller's Office as an alternative possi-
bility. Noting that past such efforts had been unsuccessful, Mr. Taylor
said that he would be hesitant about including operational functions
in his office. Suggesting the possibility of obtaining contractor support
for conducting the study, Mr. Taylor opined that some outside expertise
must exist in this area. Mr. May noted that this entire field was developing
so rapidly that someone with good contacts in the marketplace would be
useful. Mr. Taylor added that just gaining some internal experience in
handling this question probably would also be helpful. (U)

13. Summarizing, Mr. Carlucci concluded that there were no objec-
tions to conducting the proposed study. In keeping with Mr. Dirks'
concerns, however, the project team should restate the problem and issues.
Furthermore, the team should strive to avoid producing what Mr. Hicks
cautions against, "another esoteric study." Recalling his experience
on the Intelligence Community Staff, Mr. McMahon advised that he had
concluded that what was needed in the ADP area was a coordination staff
that understood each component's needs and could instruct each one to
devise systems that were within a specified technical and procedural
framework, would perform specified tasks, and would be compatible with
other systems. Mr. Carlucci reiterated his decision to pursue the recom-
mended approach, noting that if the Committee saw that it was not working
out, the Committee could consider doing something else. He added that
the terms of reference for the study should include considering ways
of "doing more with less." (U)

14. Mr. Johnson asked if the Committee wanted to discuss possible
candidates for the position of full-time project manager. Mr. Carlucci
suggested that members submit any nominees to Mr. Johnson. Noting that
the DDA had the task of tackling the problem, Mr. McMahon suggested that
the DDA should choose the individual. Mr. May listed several possible
candidates, several of whom were interested in the job. (U)

15. Proceeding to the second agenda item, the Executive Committee
role in ADP management, Mr. Johnson highlighted what the review process
had accomplished during the past year. He noted the Committee had seen
where most of the Agency ADP resources were going and that the growth
in central ADP services would require more capacity, either in FY 1980
or FY 1981. The use of ADP resources had been related to specific mission
areas. Finally, the review process had highlighted the absorption by
non-Agency programs of an increasing percentage of Agency resources,
unsuccessful attempts to program for minicomputers as alternatives to
large mainframes, and the need to plan and control registry automation. (U)

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16. ▆▆▆▆▆▆▆▆▆ then outlined the Committee Staff's proposal for future Executive Committee involvement in reviewing and managing ADP. He suggested that the Committee review focus on four areas:

-- ODP Resources. At the beginning of each fiscal year, the Director of ODP would provide the Committee a briefing on the state of ADP in the Agency, including current year user requirements, the ability to satisfy these requirements, and ODP's five-year plan.

-- ADP Projects. Executive Committee review of current year ADP projects would continue to be based on "ADP Project Decision Forms," and previously established review thresholds would remain unchanged. The Committee meetings on this topic, however, would be limited to policy issues arising from members' individual review of the project decision forms and to those recommended by the Staff for review. One to three meetings should be sufficient for this purpose.

-- Major capital investments. Part of the annual review should be devoted to reviewing major capital investments included in the Agency's program plan before the latter is submitted to the Resource Management Staff in June of each year. The Committee Staff would summarize appropriate component plans and correlate them with pro- grammed investment requirements for presentation to the Committee.

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-- Strategic objectives. The Committee would spend a total of about three hours during the year reviewing strategic ADP objectives. This would include approving the terms of reference for the information handling study discussed earlier, tracking the progress of the study, and approving and tracking progress toward the proposed objectives.

▆▆▆▆▆▆▆▆▆ concluded that the above schedule would enable the Committee to focus on longer range, broader issues and require less of their time. (U)

17. Mr. Johnson emphasized that even though not all of the ADP projects would be reviewed by the Committee meeting as a group, all of them should still be brought to members' attention, even if only in memorandum form. Congress has gradually been convinced that senior Agency management is involved in reviewing ADP projects, and the Agency should not jeopardize its credibility in this area. ▆▆▆▆▆▆▆ assured the Committee that it would continue to see all of the paperwork that it currently does, but only selected projects would be placed on the Committee's agenda. In response to Mr. May's question, ▆▆▆▆▆▆▆ clarified that the major capital investments reviewed by the Committee would include investments by other components as well as by ODP.

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Mr. Carlucci noted his understanding that the Committee would not be able to review major capital investments this year. ▆▆▆▆▆▆▆▆▆ concurred, noting that some of these would nevertheless be highlighted during the FY 1981 program review. Mr. Carlucci approved of the proposed schedule and framework for Executive Committee review and management of ADP and adjourned the meeting. (U)

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cc: D/ODP